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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/551,399

04/17/2000

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7590  
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02/21/2007

EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/551,399	<b>Applicant(s)</b> CHASE ET AL.	
	<b>Examiner</b> Shick C. Hom	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32,34,35 and 80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32,34,35 and 80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 32, 34-35, and 80 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

2. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 32 lines 5-6 which recite "... frame relay switch for translating user data within at least one of the frame relay data packets into a fast packet address" is not clear as to how user data is translated into an address and whether it is reciting the ---frame relay switch including address translation circuitry for translating data link connection identifiers DLCI in the user data field of at least one of the frame relay data packets into a fast packet address representing virtual private networks based on a predetermined service category associated with said DLCI--- as recited in page 17 line 16 to page 18 line 4 of the specification.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 32, 34-35, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsube et al. (5,930,259) in view of Lee et al. (6,023,470).

Regarding claim 32:

Katsube et al. disclose a network comprising: customer premises equipment; a frame relay switch coupled to the customer premises equipment with at least one permanent virtual circuit and receiving a plurality of frame relay data packets (see col. 8 line 45 to col. 9 line 5 which recite frame relay network switching using virtual connection "permanently" defined in routing table 105),

wherein the frame relay switch is responsive to a plurality of different service categories, said plurality of different service categories is supported over a plurality of different types of communication paths (see col. 3 lines 16-25 which recite connections being set-up corresponding to different qualities of service in the destination address and identifier in the routing table), and

configured to determine a quality of service of the plurality of different service categories responsive to layer 4 data (col. 3 lines 40-50 recite the destination address including the upper layer protocol identifier and col. 7 lines

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13-18 recite the upper layer being above the network layer such as TCP layer clearly anticipate the quality of service responsive to layer 4 data).

Katsube et al. disclose all the subject matter of the claimed invention with the exception of whereby the frame relay switch translating user data within at least one of the frame relay data packets into a fast packet address as in claim 32; wherein the frame relay switch is responsive to Internet protocol (IP) data within the frame relay data packets as in claim 34; wherein the frame relay switch is responsive to layer 3 Internet protocol (IP) data as in claim 35; and wherein the different types of communication paths comprises at least two of a public internet, a local intranet, or an extranet as in claim 80.

Lee et al. from the same or similar fields of endeavor teach that it is known to provide the frame relay switch being coupled to a customer premises equipment with at least one permanent virtual circuit (see col. 10 lines 51-62 which recite the use of permanent virtual circuits to connect SmartPOP, i.e. customer premises, equipments);

receiving a plurality of frame relay data packets, and translating user data within at least one of the frame relay data packets into a fast packet address (see col. 60 line 62 to

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col. 61 line 3 which recite means for physical and link-layer protocol conversion of the frames to a packet mode format compatible with fast-packet data networks); wherein

the frame relay switch is responsive to Internet protocol (IP) data within the frame relay data packets; wherein the frame relay switch is responsive to layer 3 Internet protocol (IP) data (see col. 48 lines 56-64 and col. 50 lines 18-30 which recite the use of OSI stack layer protocols and the internet protocol IP clearly anticipate the switch being responsive to OSI layers 3, 4, and IP data) and wherein

the different types of communication paths comprises at least two of a public internet, a local intranet, or an extranet (see col. 1 lines 26-59 which recite communication via the public switched telephone network and calls routed to a local exchange).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the frame relay switch being coupled to a customer premises equipment with at least one permanent virtual circuit; receiving a plurality of frame relay data packets, and translating user data within at least one of the frame relay data packets into a fast packet address; and wherein the frame relay switch is responsive to Internet protocol (IP) data within

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the frame relay data packets; wherein the frame relay switch is responsive to layer 3 Internet protocol (IP) data; and wherein the different types of communication paths comprises at least two of a public internet, a local intranet, or an extranet as taught by Lee et al. in the communications network of Katsube et al. The frame relay switch being coupled to a customer premises equipment with at least one permanent virtual circuit; receiving a plurality of frame relay data packets, and translating user data within at least one of the frame relay data packets into a fast packet address; and wherein the frame relay switch is responsive to Internet protocol (IP) data within the frame relay data packets; and wherein the frame relay switch is responsive to layer 3 Internet protocol (IP) data; and wherein the different types of communication paths comprises at least two of a public internet, a local intranet, or an extranet can be implemented by connecting the means for translating user data into fast packet address using OSI protocol including the IP protocol and wherein the different types of communication paths comprises at least two of a public internet, a local intranet, or an extranet of Lee et al. in the network of Katsube et al.

The motivations for connecting the means for translating user data into fast packet address and wherein the different types of communication paths comprises at least two of a public



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internet, a local intranet, or an extranet as taught by Lee et al. in the communication network of Katsube et al. being that it provides the desirable added feature of the frame relay switch being able to handle both frame relay data and fast packet data and providing the efficiency of routing data using the public internet and local intranet to the customer equipment.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH SH

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